



National Transportation Safety Board Aviation Accident Final Report

Location:	SYRACUSE, NY	Accident Number:	IAD96LA072
Date & Time:	05/06/1996, 2145 EDT	Registration:	N222KD
Aircraft:	Piper PA-60-600	Aircraft Damage:	Minor
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General Aviation - Positioning		

Analysis

After leveling the airplane at 6000 feet msl, the pilot noticed that the upper half of the clamshell cockpit door had become ajar, and the door unsafe light illuminated. The pilot attempted to secure the door, but it separated from the aircraft. During the occurrence, the pilot's left hand was seriously injured. He was not certain of how the injury occurred, but he believed that his left hand had contacted the left engine propeller blades. He wrapped his hand in a flight jacket and made an emergency landing, where he received medical attention. Attempts to recover the upper half of the clamshell door for further examination were unsuccessful.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to ensure that his hand would remain clear of the propeller, while attempting to take remedial action to secure the clam shell door. The unlatching and separation of the clam shell door from the aircraft were related factors.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CRUISE - NORMAL

Findings

1. (F) DOOR, EXTERIOR CREW - UNLATCHED
2. REMEDIAL ACTION - ATTEMPTED - PILOT IN COMMAND
3. (F) DOOR, EXTERIOR CREW - SEPARATION

Occurrence #2: PROPELLER/ROTOR CONTACT TO PERSON

Phase of Operation: CRUISE - NORMAL

Findings

4. PROPELLER SYSTEM/ACCESSORIES, BLADE
5. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On May 6, 1996, at about 2145 eastern daylight time, a Piper PA-60-600, N222KD, operated by New Creations, Inc., Columbus, Ohio, sustained minor damage when the pilot's door opened while the airplane was in cruise flight at 6000 feet mean sea level (msl) in the vicinity of Syracuse, New York. The commercial pilot sustained serious injuries when the left engine propeller blade(s) struck his left thumb and fore finger. The pilot declared an emergency and diverted to Syracuse, where the airplane landed on runway 28, without further incident. The flight was intended to be a positioning flight, from Utica, New York, to Buffalo, New York. Visual meteorological conditions prevailed and a instrument flight rules (IFR) flight plan was filed. The flight was conducted under 14 CFR Part 91.

The pilot stated that as the airspeed increased from climb to cruise airspeed as the airplane leveled off at 6,000 feet msl, he noticed that the cockpit door became ajar and the door unsafe light illuminated. He said that he engaged the autopilot and adjusted his seat rearward to better observe the door. He said that he noticed a gap of about 1/2 to 1 inch between the door and frame closest to the instrument panel and saw and heard the door vibrating. He reported that he tried to move the door forward in an attempt to secure the safety retaining pin in the door. The pilot stated that the next thing he recalled was hearing a loud noise, and then retracting his injured left hand back into the cockpit. He reported that he wrapped his injured hand in his flight jacket, and decided to divert to Syracuse, New York. He contacted Syracuse Approach Control to declare an in-flight emergency, and requested that emergency vehicles and an ambulance meet the airplane after landing at Syracuse Airport. He said that he landed the airplane without further incident, turned right off the runway, shut down the engines and received medical attention.

According to the Federal Aviation Administration (FAA) Inspector, postaccident examination of the airplane revealed that the upper half of the clamshell style door was missing, and there was a small dent in the top of the cabin. The FAA Inspector reported that there was a large amount of blood in the left pilot seat area, and some on the exterior of the aircraft in the vicinity of the left wing root fairing. The FAA Inspector stated "[The pilot] is not sure what caused the injury to his left hand, however, it appears that once his hand disengaged the door handle, the slipstream carried it aft where it was struck by the propeller." The upper half of the clamshell door was not recovered.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	25, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/29/1996
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	1375 hours (Total, all aircraft), 120 hours (Total, this make and model), 1100 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N222KD
Model/Series:	PA-60-600 PA-60-600	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	60-0557-181
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	100 Hour	Certified Max Gross Wt.:	5500 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-540
Registered Owner:	NEW CREATIONS, INC	Rated Power:	290 hp
Operator:	NEW CREATIONS, INC	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:	US CHECK AIRLINES	Operator Designator Code:	BSYA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	SYR, 421 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	2151 EDT	Direction from Accident Site:	270°
Lowest Cloud Condition:	Scattered / 5000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots / 18 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	12° C / 1° C
Precipitation and Obscuration:			
Departure Point:	UTICA, NY (UCA)	Type of Flight Plan Filed:	IFR
Destination:	BUFFALO, NY (BUF)	Type of Clearance:	IFR
Departure Time:	2135 EDT	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Minor
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	BUTCH WILSON	Report Date:	01/08/1997
Additional Participating Persons:	DICK LANSFIELD; ROCKCHESTER, NY		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).